

ABSTRACT

METHOD AND APPARATUS FOR MAKING SPARK PLUG

This invention relates to a method and apparatus for making a spark plug, in particular, for making a high-performance spark plug having a center electrode having a firing end made of Pt, Ir, Rh, Pd, Re, Os, Ru or alloy thereof, with its firing end diameter of about 0.3-1.0 mm. One of the embodiments provides a method comprising the steps of: extending a metal strip from an end of the metal shell; positioning a spacer above a firing end of the center electrode; preliminarily bending the metal strip toward the spacer so as to form an arc portion in the metal strip; and then precisely forming a gap-distance between the metal strip and the firing end of the center electrode by applying a force to the metal strip. The method may further include a step of measuring the position of the firing end of the center electrode so as to determine a position for the spacer and/or a step of retrieving the spacer after bending the metal strip so that the gap-distance between the metal strip and the center electrode is adjusted to a required value by referring to a position of the preliminary bent metal strip and the position of the firing end of the center electrode. The invention also provides an apparatus for performing this method.

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